

Working together, the U.S. Environmental Protection Agency and the Texas Commission on Environmental Quality continue to coordinate with local, state and federal officials to address the human health and environmental impacts of Hurricane Harvey and its aftermath, especially the water systems in the affected areas. The TCEQ has approximately 500 people **and EPA has 57263 people** assisting in response to this natural disaster.

Formatted: Highlight

As part of this coordination, a Unified Command was established between the EPA, the TCEQ, the General Land Office, and the U.S. Coast Guard to oversee all emergency response efforts. This Unified Command is supported by three operational branches in Corpus Christi, Houston, and Port Arthur. In addition to the EPA, the TCEQ, the GLO, and the USCG, multiple agencies and groups are supporting each of the operational branches, including the Texas National Guard, 6th Civil Support Team; the Arkansas National Guard, 61st Civil Support Team; the Oklahoma Task Force 1; and the Texas State Guard Engineering Group. Branch personnel are working to continuously monitor water and wastewater systems, as well as assess spills or discharges as a result of the storm.

As of **Thursday, Sept 14 21**, the following information is available:

Formatted: Highlight

Drinking Water: To date, about 2,238 drinking water systems have been affected by Harvey. Of those: 2,014 systems are fully operational, **77-48** have boil-water notices, and **19-5** are shut down. **Both the EPA and T the TCEQ are contacting remaining systems to gather updated information on their status. Assistance teams are in the field working directly with system operators to expedite getting systems back to operational status.**

Formatted: Highlight

Wastewater and Sewage: The TCEQ has made contact with 1,219 wastewater treatment plants in the 58 counties within the Governor's Disaster Declaration. Of those, **31-9** are inoperable in the affected counties. The agencies are aware that releases of wastewater from sanitary sewers are occurring as a result of the historic flooding and are actively working to monitor facilities that have reported spills. Additionally, the agencies are conducting outreach and providing technical guidance to all other wastewater facilities in flood-impacted areas. Assistance teams will continue to be deployed to work directly with system operators to expedite getting systems back to operational status.

**On September 25, 2017, the EPA provided written explanation to FEMA allowing proceeds from State Revolving Loan Funds to be used to address immediate recovery and future resiliency efforts in Texas. EPA is also reviewing a Texas Water Development Board's request that certain water infrastructure projects be exempt from American Iron and Steel requirements. On Sept. 12, the EPA approved the Texas Water Development Board proposed approaches to utilize State Revolving Funds from the EPA to address immediate recovery and future resiliency efforts in Texas.**

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Flood Water: Water quality sampling will be focused on industrial facilities and hazardous waste sites. Floodwaters contain many hazards, including bacteria and other contaminants. Precautions should be taken by anyone involved in cleanup activities or any others who may be exposed to flood waters. These precautions include heeding all warnings from local and state authorities regarding safety advisories. In addition to the drowning hazards of wading, swimming, or driving in swift floodwaters, these waters can carry large objects that are not always readily visible that can cause injuries to those in the water. Other potential hazards

include downed power lines and possible injuries inflicted by animals displaced by the floodwaters.

Critical Water Infrastructure: The TCEQ has made contact with the owners of the 340 dams in the impacted areas. There are 15 dams that have reported some type of damage. There have been no reports of downstream damage or loss of life. [The TCEQ will be meeting with affected dam owners in the next week.](#)

Additional EPA/TCEQ updates include:

· Superfund Sites: The EPA and the TCEQ continue to get updates about the status of specific sites from the parties responsible for ongoing cleanup of the sites. The TCEQ has completed the assessment of all 17 state Superfund sites in the affected area. There were no major issues noted. The TCEQ will continue to monitor sites to ensure no further action is needed in regards to the storm.

**All 43 Superfund NPL sites in the hurricane affected area have been assessed. Of these, 42 sites have been cleared. Post-hurricane summaries based on preliminary data are online ([www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey)). Quality assured data reports for Superfund sites are being posted online as they are received.**

**The San Jacinto River Waste Pits site requires additional follow up**

The EPA completed site assessments at all 43 Superfund sites affected by the storm. Of these sites, two (San Jacinto Waste Pits and U.S. Oil Recovery) require additional assessment efforts. Both EPA and the potentially responsible parties' dive teams collected surface sediment samples from 14 areas above the cap. The potentially responsible parties are continuing cap repairs and maintenance activities. All work is being conducted in accordance with the approved work plan and under EPA oversight. A underwater inspections by the EPA Dive Team at the San Jacinto Waste Pits site started this week and are continuing. No final determinations have been made by the Dive Team and their assessment is on-going. Repairs are underway on armored layer of the cap continue. The security cameras have not been restored and repairs are on-going. Yesterday, an EPA On-scene coordinator conducted an inspection of Vince Bayou to follow up on a rumor that material was offsite and did not find any evidence of a black oily discharge or material from the U.S. Oil Recovery site. The responsible party has been directed to sample the water standing in the open tanks and remove the excess storm waters. The responsible party has conducted operations to remove the excess water and ensure that all materials in the former wastewater treatment tanks are secured.

The EPA or responsible parties have completed sampling the 34 Superfund sites in Texas and will finish sampling the 9 sites in Louisiana tomorrow. Post-hurricane Superfund site summaries based on preliminary data results are being released and quality assured data collected by the potentially responsible parties have been posted to the website. EPA also posted quality assured data collected by the responsible parties from a discolored area above the cap. Sample data collected by the potentially responsible parties is similar to historical data for both water and sediments. Preliminary data from samples collected by the dive teams is expected soon.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

· Debris Management: ~~The TCEQ, supporting the EPA, launched a social media blitz to encourage the separation of debris today.~~ The TCEQ has approved ~~118~~ <sup>161</sup> Temporary Debris Management Sites in areas under the Federal or State Disaster Declaration designations. [View a map of all Temporary Debris Management Sites](#) [Exit the TCEQ.](#)

Formatted: Highlight

Commented [EL1]: Needs updating

TCEQ regional offices and local authorities are actively overseeing the siting and implementation of debris and waste management plans in the affected area. The EPA, the TCEQ, and Army Corps of Engineer field observers are visiting staging and landfills to ensure compliance with guidelines. ~~EPA has participated in over 200 joint site observations and expects to conclude its activities next week.~~ EPA observers have reported that TCEQ is providing onsite compliance assistance and follow up visits to confirm compliance with permits. TCEQ plans to conduct site visits as long as approved debris staging areas are processing debris and transferring debris to landfills. EPA Community Liaisons continue to provide federal and state guidance and best practices to thousands of individuals that area dealing with potential hazards in damaged or lost homes. ~~The TCEQ and EPA released Handling Debris during Natural Disasters fact sheets in English, Spanish and Vietnamese.~~

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

[View a map of all Temporary Debris Management Sites](#) [Exit the TCEQ.](#)

Formatted: Highlight

· Reconnaissance/Orphan Containers: ~~The TCEQ continues to lead in monitoring facilities that have reported spills.~~ Unified Command has completed reconnaissance activities associated with hurricane impacts. ~~The TCEQ continues to lead in monitoring facilities that have reported spills.~~ Orphan containers, which include drums and tanks, found floating in or washed up near waterways continue to be gathered, sorted and grouped by type, prior to shipping them off for safe, proper treatment and disposal. ~~All branches of the Unified Command have collected over 980 orphan containers. Three additional containers were collected this week.~~ The Unified Command has bulked and sampled the collected oil and hazardous materials in preparation for proper disposal. Sample results are expected next week and disposal should be completed within the next two weeks. ~~USCG and Texas General Land Office will continue to complete Vessel Recovery activities.~~ Reconnaissance and assessment of facilities and vessels are being conducted to identify any leaks or spills and responded to accordingly. ~~All branches of the Unified Command have collected a total of 648 orphan containers, and currently do not have any remaining know targets.~~ The Unified Command is also working to ensure the disposal of oil and hazardous materials is conducted properly. Response personnel operating out of Corpus Christi are expected to complete their work this week.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

· Air Quality Monitoring: One of the many preparations for Hurricane Harvey included the EPA, the TCEQ, and other monitoring entities temporarily shutting down several air monitoring stations from the greater Houston, Corpus Christi, and Beaumont areas to protect valuable equipment from storm damage. Since then, state and local authorities have been working to get the systems up and running again as soon as possible. As of ~~Monday, Sept. 11~~ <sup>Thursday Sept 20</sup>, the TCEQ's air monitoring network is operational 100 percent in Corpus Christi, 96 percent in Houston, and 86 percent in Beaumont. The TCEQ is working to get the complete network fully operational as soon as possible and we will notify the public when the 3 remaining monitors are online. Of the available air monitoring data collected from Aug. 24 through Sept. ~~14~~ <sup>20</sup>, all measured concentrations were well below levels of health concern. ~~The EPA conducted air monitoring using the TAGA mobile air monitoring bus in southeast Houston neighborhoods nearest industrial sources and data reports for Sept. 5, 6, 7, 10, 12, and 13 are available online at [www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey)~~ [Exit the TCEQ.](#) The EPA has concluded that the probable source of benzene and volatile organic compound readings in the Manchester community in Houston was the roof failure and spill from a light crude storage tank at the Valero Houston Refinery during Hurricane Harvey. The EPA investigation into Valero Houston Refinery response and cleanup activities will continue.

TodayLast week, the TAGA mobile air monitoring bus began monitoring air quality around three additional industrial sources near Deer Park, Texas. The EPA also sent its aerial surveillance aircraft to conduct a screening level assessment to evaluate unreported or undetected releases from facilities with Risk Management and/or Response Plans within the hurricane impacted areas. The EPA's plane instrumentation measured 13 chemicals. The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values. The screening level results from ASPECT were compared to the ASPECT list of the TCEQ's short-term Air Monitoring Comparison Values and found no exceedances of the short-term AMCVs.

Formatted: Highlight

Both TCEQ and EPA investigators have spent numerous hours, both day and night, monitoring neighborhoods and industrial fence lines with hand-held instruments, such as optical gas imaging cameras (OGIC), toxic vapor analyzers, summa canisters, and portable multi-gas monitors. The use of these tools allows for the most effective source identification for drifting volatile organic compound (VOC) plumes so that swift action can be taken to address the cause of these emissions. TCEQ investigators in the Houston, Corpus Christi, and Beaumont regional offices routinely conduct reconnaissance monitoring near industrial fence lines and adjacent communities. Reconnaissance monitoring has been conducted in these areas with increased frequency to identify potential emission sources. In furthering efforts to monitor storm impacted areas and address emission sources, the TCEQ conducted aerial surveys in the Houston and Beaumont areas using a helicopter equipped with an OGIC that can image VOCs and other hydrocarbons invisible to the eye and EPA's Airborne Spectral Photometric Environmental Collection Technology (ASPECT) plane conducted real-time sampling of potential emission targets. EPA has completed its air monitoring activities. Additionally, the EPA completed air quality analyses using their Trace Atmospheric Gas Analyzer (TAGA) mobile monitoring system in Houston (9/5-7 and 9/10-12), Deer Park (9/14), Baytown (9/15), Sweeny and Texas City (9/17), Beaumont, Port Arthur, Victoria, and Point Comfort (9/18), and Corpus Christi (9/19). The results from continuous air monitors, hand-held instruments, ASPECT and TAGA have shown no levels of immediate health concern.

Commented [RV2]: Do we have the data QA/QC'd to report on findings?

Formatted: Font: Lucida Bright, 10 pt

Formatted: Normal

Formatted: Font: Lucida Bright, 10 pt, Highlight

Formatted: Font: Lucida Bright, 10 pt, Highlight

Formatted: Font: Lucida Bright, 10 pt

Formatted: Highlight

Formatted: Normal

Formatted: Font: Lucida Bright, 10 pt, Highlight

and summary information is available on [www.epa.gov/hurricane-harvey](http://www.epa.gov/hurricane-harvey). Both TAGAs and ASPECT have been demobilized.

Refineries/Fuel Waivers: The EPA approved the request from the State of Texas to continue to waive requirements for fuels in Texas through the end of the month to help address the emergency circumstances in Texas from Hurricanes Harvey and Irma. The waiver is for reformulated gasoline (including gasoline blendstock for oxygenate blending) and low volatility gasoline in Texas, and also continues the previous waived requirement to use Texas Low Emission Diesel (TxLED) in 110 counties in Texas. This waiver is effective immediately and will continue through October 1, 2017.

Formatted: Body Text

Formatted: Highlight

Formatted: Font: (Default) Lucida Bright, 10 pt, Highlight

On September 15, EPA announced that it would exercise enforcement discretion for petroleum distribution facilities, gasoline storage facilities and bulk fuel terminals in Texas that had been impacted or damaged by Hurricane Harvey. These No Action Assurances expire before midnight on September 29, 2017.

Formatted: Font: Lucida Bright, 10 pt

Formatted: Font: (Default) Lucida Bright, 10 pt, Highlight

Formatted: Font: (Default) Lucida Bright, 10 pt

For additional information, please visit the TCEQ's Hurricane Response website.

View the EPA Story Map [Exit the TCEQ](#) about Hurricane Harvey Response activities.

Formatted: Highlight